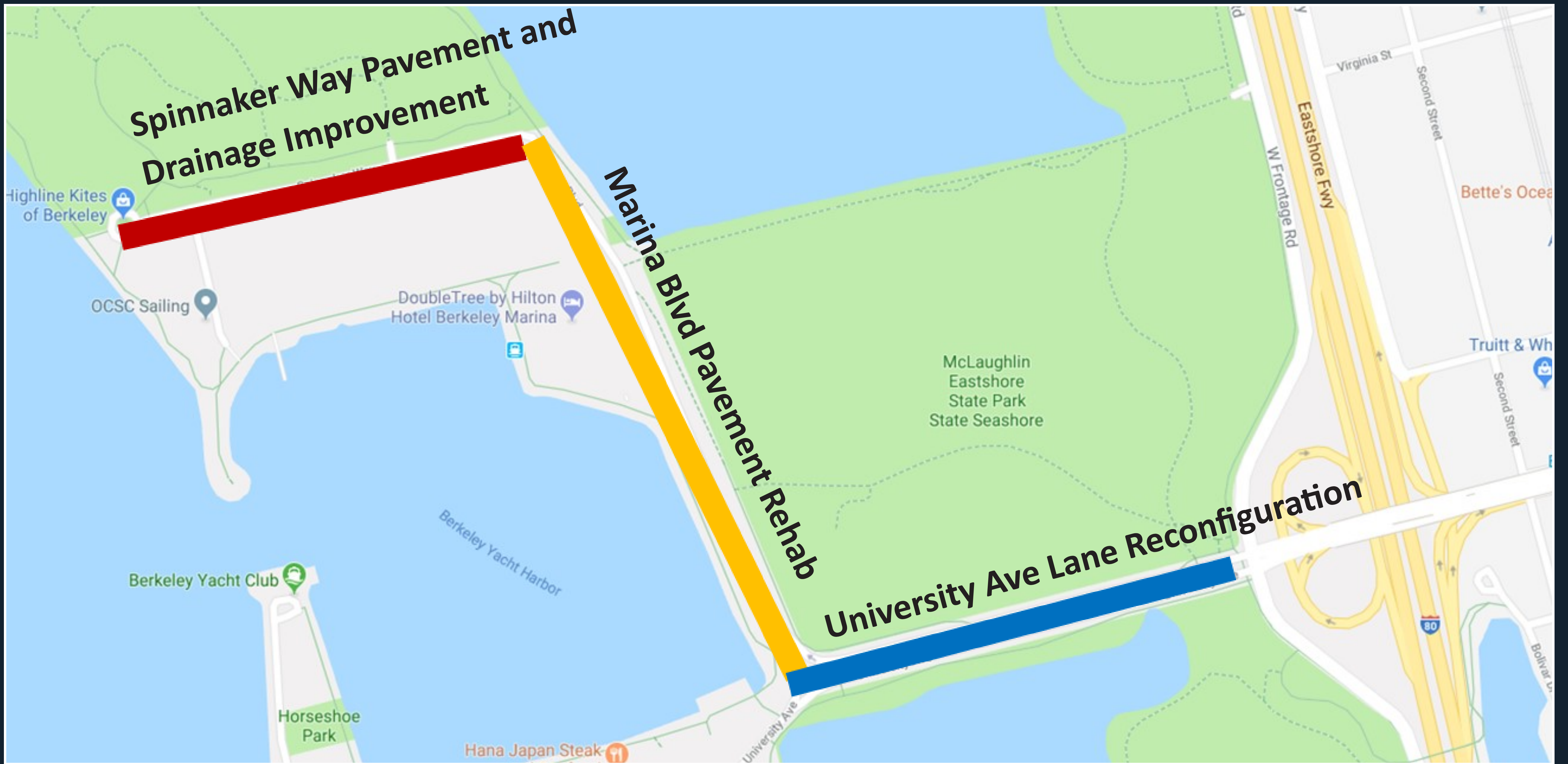


BERKELEY MARINA ROADWAY IMPROVEMENTS



FUN FACTS

RECYCLE & REUSE

Full-Depth-Reclamation eliminated new road base material

MATERIALS SAVED

27,000+ Tons

TRUCK LOADS

1,800+

TRIPS

3,600+

FUEL FOR TRANSPORT

~4,500 gallons

CO2*

~100,000 LBS

* Approximated for demonstration purpose

ASPHALT DIET

the use of permeable pavers reduced asphalt usage

ASPHALT SAVED

400+ Tons

TRUCK LOADS

25+

TRIPS

50+

FUEL FOR TRANSPORT

~250 gallons

CO2*

~5,500 LBS

* Approximated for demonstration purpose

PCI

flattened roadway bumps, bumped up Pavement Condition Index (PCI)

Overall Marina Roadway Pavement Condition Index (PCI)

PREVIOUS

28 (Poor)

POST CONSTRUCTION*

71+ (Very Good)

ALAMEDA COUNTY

68 (Good); 2018 data

* Approximated for demonstration purpose

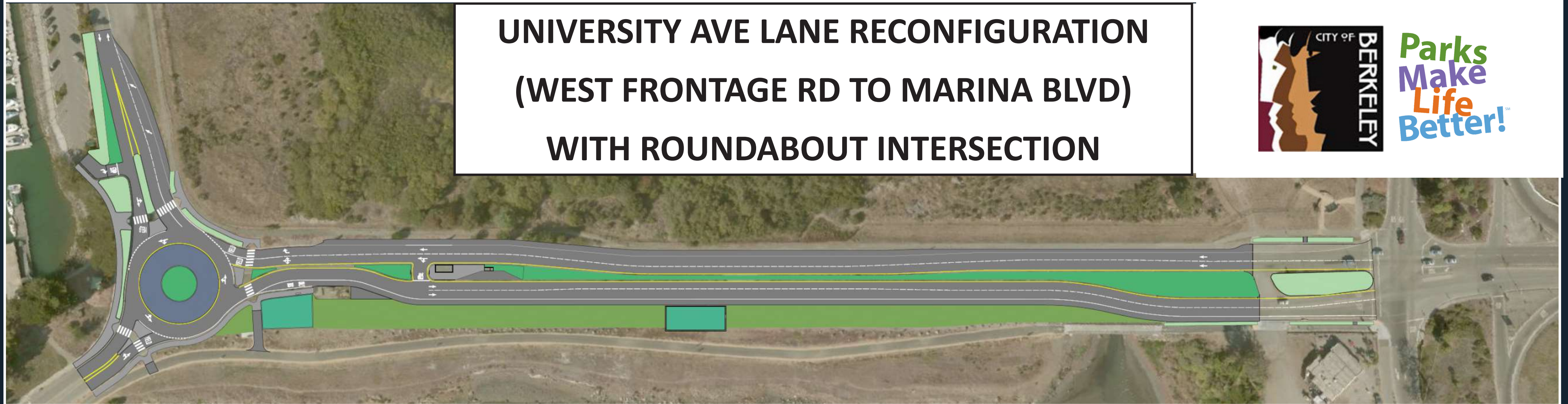
Total Project Area Improved:
~6 acres

TOTAL FUNDING SOURCES \$8M:

- Measure T1 Infrastructure Bond
- DoubleTree Hotel Capital Contribution
- Alameda County Measure B & BB
- Senate Bill 1



BERKELEY MARINA ROADWAY IMPROVEMENTS



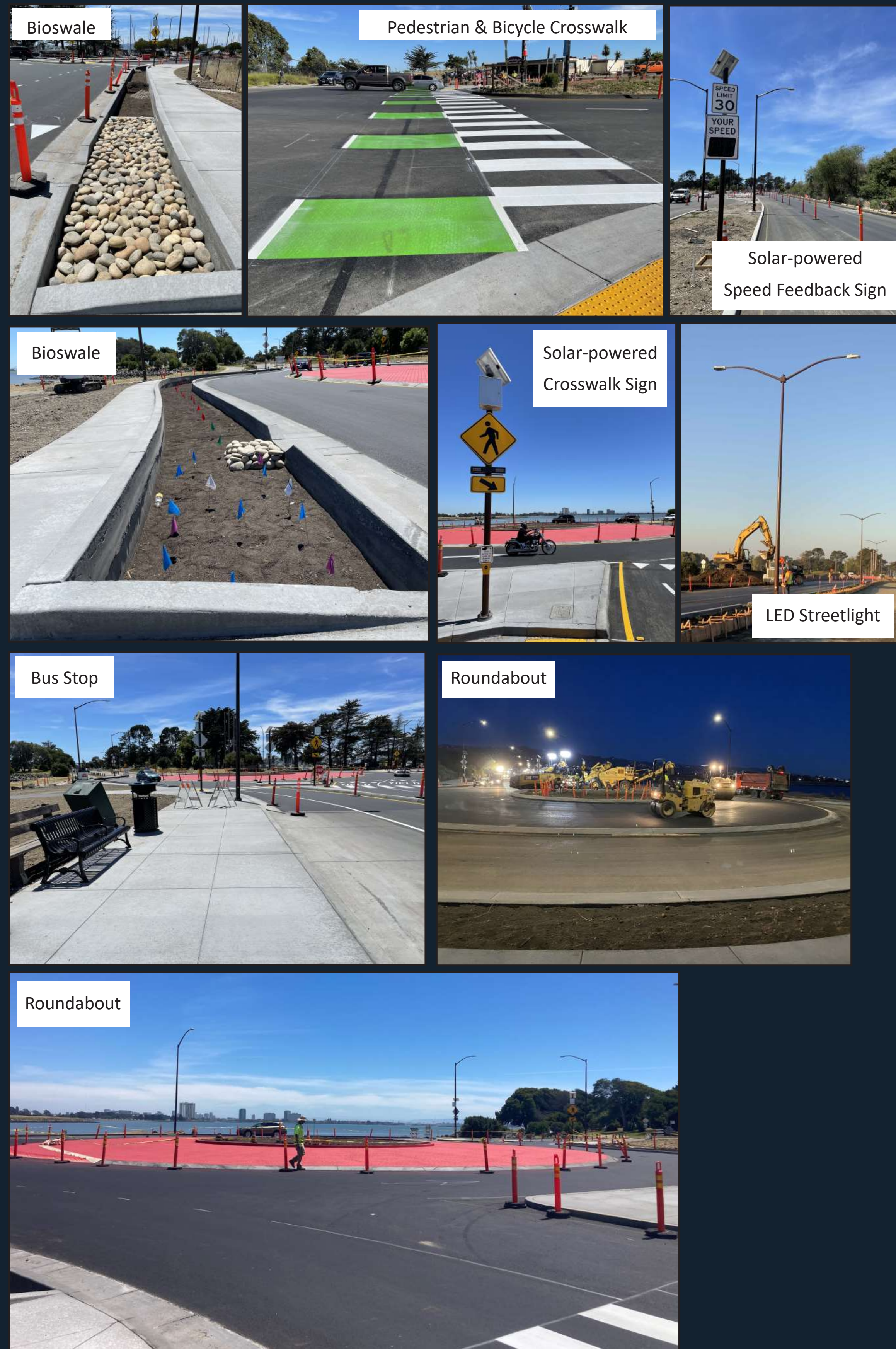
**UNIVERSITY AVE LANE RECONFIGURATION
(WEST FRONTAGE RD TO MARINA BLVD)
WITH ROUNDABOUT INTERSECTION**



BEFORE AND AFTER



PROJECT FEATURES (Constructed June, 2022)



ROUNDABOUT INTERSECTION

Roundabouts: A Safer Choice

U.S. Department of Transportation
Federal Highway Administration

"Personally, I love them, and I'll tell you why. You only have to stop one lane of traffic, then go to the middle and wait. The cars can't go much faster than 20 mph through the roundabout so the crossing aspect is great."

Dennis Halton
School Crossing Guard, Oconomowoc, Wisconsin
Green Bay Press-Gazette
February 6, 2007

"We have had a lot of people not very happy about the idea of roundabouts, but after they are constructed, those fears mostly go away."

Brian Walsh
Washington State Department of Transportation
Seattle Times
June 5, 2002

"We all know people speed up to get through a yellow light. But at the roundabout, all the vehicles have to slow down... we have almost 50 roundabouts now, we have a lot [fewer] personal injuries. We have fewer fatalities."

James Brinkard
Mayor, City of Carmel, Indiana
www.abc17.com
November 6, 2007

Education is key.
Education is vital to the acceptance and success of a roundabout. Navigating a roundabout is easy. But because people can be apprehensive about new things, it's important to educate the public about roundabout use.

There are just a few simple guidelines to remember when driving through a roundabout:

1. Slow down.
2. If there's more than one lane, use the left lane to turn left, the right lane to turn right, and all lanes to go through, unless directed otherwise by signs and pavement markings.
3. Yield to pedestrians and bicyclists.
4. Yield at the entry to circulating traffic.
5. Stay in your lane within the roundabout and use your right-turn signal to indicate your intention to exit.
6. Always assume trucks need all available space — don't pass them!
7. Clear the roundabout to allow emergency vehicles to pass.

Visit safety.fhwa.dot.gov to learn more about roundabouts.

U.S. Department of Transportation
Federal Highway Administration

Design standards for roundabouts continue to evolve, and not all features of existing roundabouts meet current environmental practices. Please refer to FHWA's web site for recommendations on current design practices.

Original source photo by Lee Stockstill. Photo has been altered to illustrate roundabout and signal signage.

What is a roundabout?

A roundabout is a type of circular intersection with yield control of entering traffic, islands on the approaches, and appropriate roadway curvature to reduce vehicle speeds.

Modern roundabouts are different from rotaries and other traffic circles. For example, roundabouts are typically smaller than the large, high-speed rotaries still in use in some parts of the country. In addition, roundabouts are typically larger than neighborhood traffic circles used to calm traffic.

A roundabout has these characteristics:

- No need to change lanes to exit
- Yield signs at entries
- Generally Circular Shape
- Geometry that forces slow speeds
- Can have more than one lane
- Counterclockwise circulation

Why consider a roundabout?

Compared to other types of intersections, roundabouts have demonstrated safety and other benefits.

Roundabouts:

- > **Improve safety**
 - More than 90% reduction in fatalities*
 - 76% reduction in injuries**
 - 35% reduction in all crashes**
 - Slower speeds are generally safer for pedestrians
- > **Reduce congestion**
 - Efficient during both peak hours and other times
 - Typically less delay
- > **Reduce pollution and fuel use**
 - Fewer stops and hard accelerations, less time idling
- > **Save money**
 - Often no signal equipment to install, power, and maintain
 - Smaller roundabouts may require less right-of-way than traditional intersections
 - Often less pavement needed
- > **Complement other common community values**
 - Quieter operation
 - Functional and aesthetically pleasing

Tips for safely walking and biking through a roundabout

Walk around the outside; don't cross through the middle.

Ride your bike as a vehicle or walk your bike as a pedestrian.

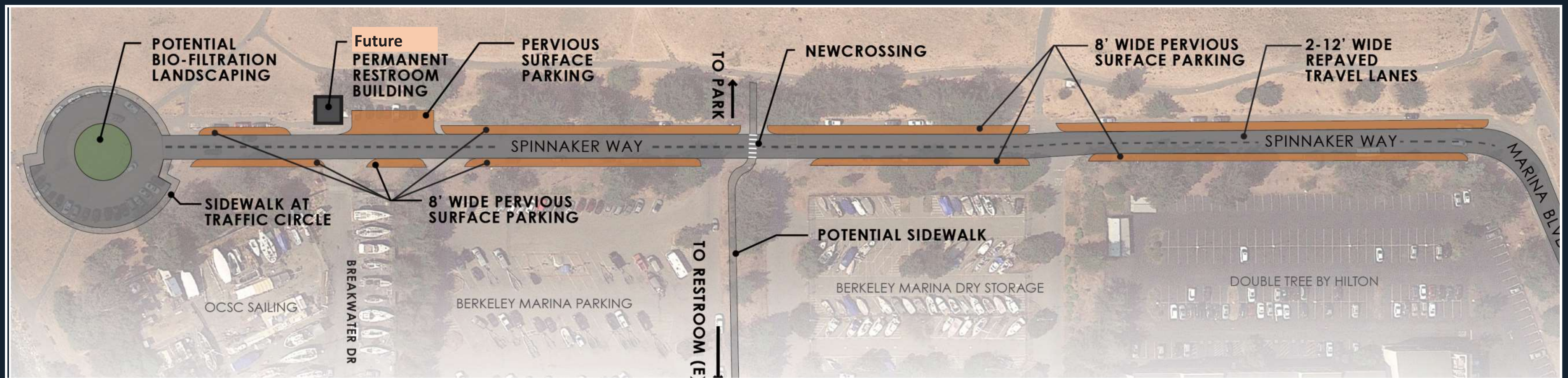
Research is ongoing on additional treatments and design considerations to address the needs of visually impaired pedestrians.

U.S. Department of Transportation
Federal Highway Administration

*"Safety Effect of Roundabout Conversions in the United States: Empirical Bayes Observational Before-After Study." Transportation Research Record 1751, Transportation Research Board (TRB), National Academy of Sciences (NAS), Washington, D.C., 2001.

**NCHRP Report 572, Roundabouts in the United States, National Cooperative Highway Research Program, TRB, NAS, Washington, D.C., 2007.

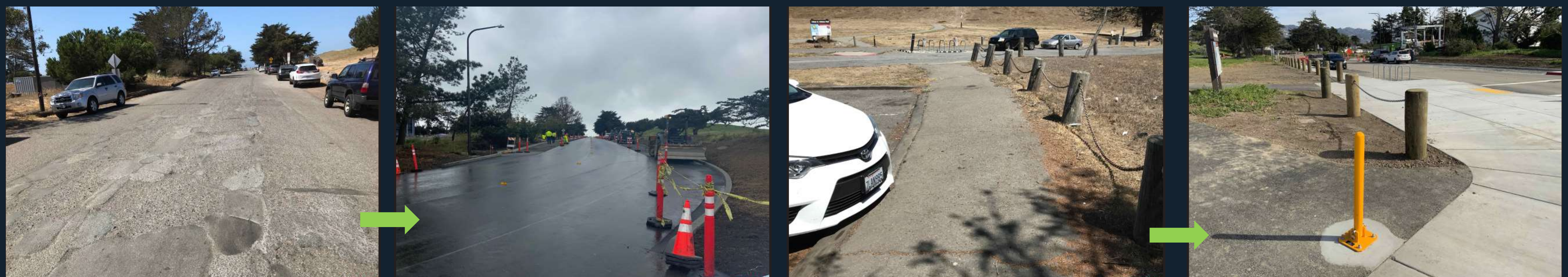
BERKELEY MARINA ROADWAY IMPROVEMENTS



SPINNAKER WAY PAVEMENT REHABILITATION & DRAINAGE IMPROVEMENTS

BEFORE AND AFTER

(Constructed June, 2022)



PROJECT FEATURES



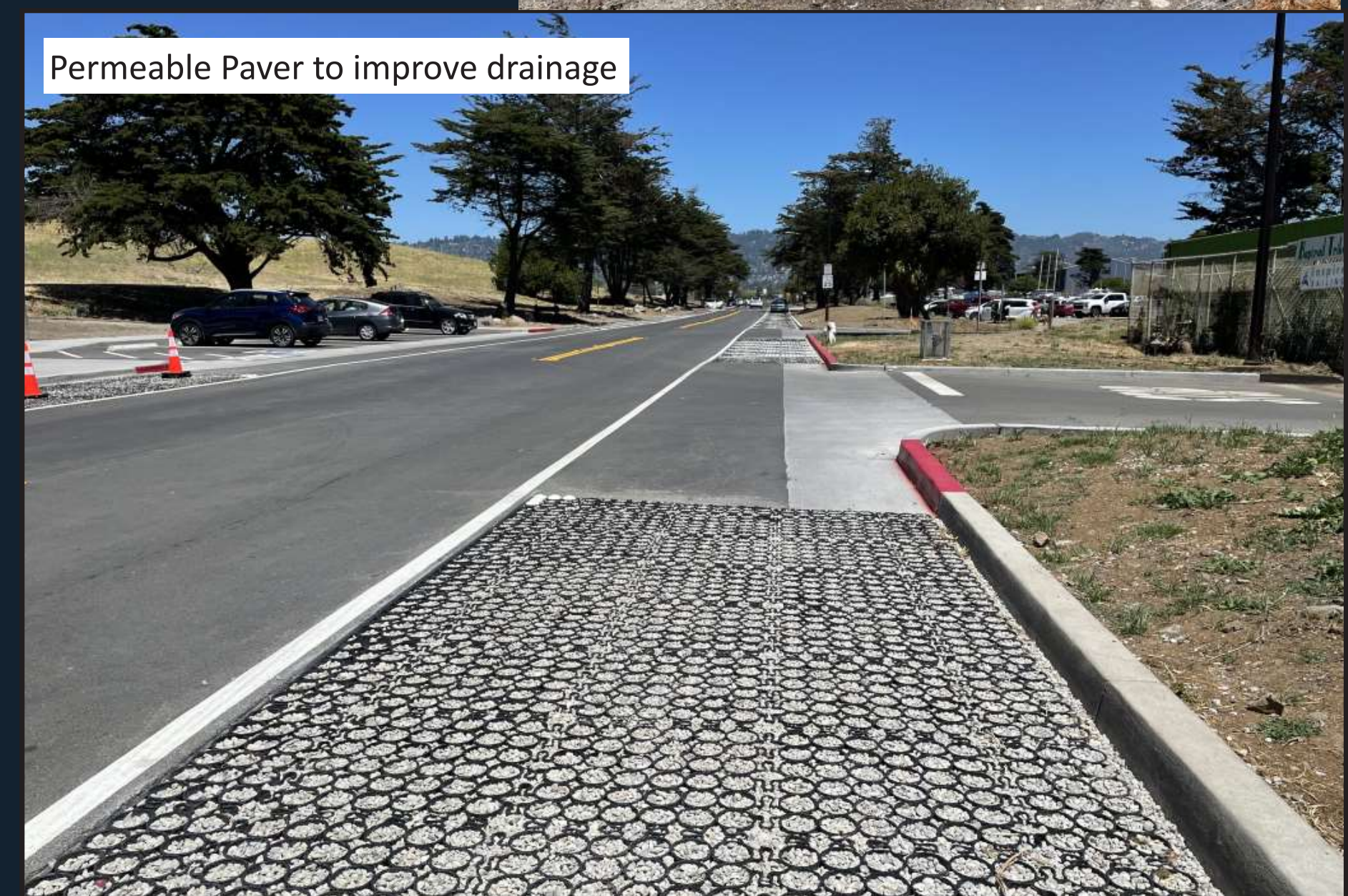
Traffic Circle with bioretention and native planting



Crosswalk



Crosswalk



Permeable Paver to improve drainage



ADA Parking



Sidewalk